In re Application of: Ron HILLELY
Serial No.: 10/553,631
Filed: October 19, 2005
Office Action Mailing Date: May 11, 2009

Examiner: Jaymi E. DELLA
Group Art Unit: 4137
Attorney Docket: 30669

In the Specification:

As required by the Examiner, please replace the paragraph at Page 1, lines 5-14, with the amended paragraph as follows:

The present invention relates to a device and method for positioning a therapeutic probe with respect to a treatment target within a patient. More particularly, the present invention is of ~~an~~ a device and method for positioning one or more therapeutic probes, such as cryoprobes, with respect to a tumor, lesion, or other treatment target in a patient, by utilizing standard imaging modalities to direct an orientation probe to the target, then rigidly affixing to the orientation probe a template comprising one or more probe guides, thereby orienting template and probe guides with respect to the target, then inserting one or more therapeutic probes through probe guides of the template and into the patient, thereby guiding the therapeutic probes to the treatment target.

As required by the Examiner, please replace the paragraph at Page 12, lines 6-16, with the amended paragraph as follows:

The present invention is of a device and method for positioning a plurality of therapeutic probes with respect to a treatment target within a patient. More particularly, the present invention is of ~~an~~ a device and method for positioning one or more therapeutic probes, such as cryoprobes, with respect to a tumor, lesion, or other treatment target in a patient, by utilizing standard imaging modalities to direct an orientation probe to the target, then rigidly affixing to the orientation probe a template comprising one or more probe guides, thereby orienting template and probe guides with respect to the target, then inserting one or more therapeutic probes through probe guides of the template and into the patient, thereby guiding the therapeutic probes to the treatment target.

As required by the Examiner, please replace the paragraph at page 24, lines 11-20, with the amended paragraph as follows:

Currently recommended dimensions for template 200 designed for guidance of 2mm probes are length 72mm, height 44mm, and thickness 10mm. Currently recommended dimensions for template 200 designed for guidance of 3mm probes are length 76mm, height 52mm, and thickness 10mm. Template 200 must be thick enough for probe guides 250 to provide accurate control of the direction of therapeutic probes 280 passing therethrough, yet thin enough to enable adequate penetration of therapeutic probes 280 into a body of a patient. Template 200 is preferably constructed of an ertacetal resin such as DELRIN®~~Delrin (ertacetal resin)~~, or a similar plastic materials, which may be sterilized using ethylene oxide sterilization, or of TEFLON®,~~Teflon,~~ or of metals of various sorts.

Additionally, to clarify an issue raised by the Examiner with respect to Figure 11, Applicant requests to replace the paragraph starting at Page 25, lines 28-30 and ending at Page 26, lines 1-5 with the amended paragraph as follows:

Attention is now drawn to Figure 11, which presents an adaptation of a photograph image of a template 200 in use during an actual surgical procedure. Three cryoprobes 290 may be seen in Figure 11. A first probe, visible near the left side of template 200, is labeled both as a therapeutic probe 280 and as a cryoprobe 290. A second cryoprobe 290 also functions as an orientation probe 210. A third cryoprobe 290, difficult to see in the photograph, is positioned directly behind orientation probe 210. ~~, each~~ Each cryoprobe 290 is connected to a gas supply line 295 operable to supply high pressure cooling gas to a Joule-Thomson orifice within each cryoprobe 290. Preferably, gas lines 295 are also operable to supply compressed heating gas to probes 290, thereby providing for heating of probes 290 to facilitate disengagement of probes 290 at the conclusion of the cooling phase of a cryoablation procedure.